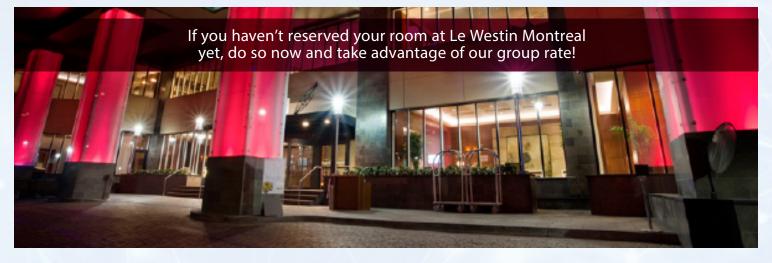




Preliminary Agenda

TUESDAY, SEPTEMBER 5th

| REGISTRATION & BREAKFAST | | Le Westin Montreal, 270 I | Rue Saint-Antoine O | |
|--------------------------|------------|--|--|---|
| 7:30 AM - 8:30 AM | _ | Breakfast | | |
| TRAININGS | | | | |
| | | TRAINING | TRAINING | TRAINING |
| 8:30 AM - 10:15 AM | | Bringing your model into real time with eMEGASIM | The Behind-the-Scenes of Inter-FPGA Communication Using High Speed Serial Links with RT-XSG/eMEGASIM | Using HYPERSIM's Advanced Features - part I |
| 10:15 AM - 10:35 AM | _ | BREAK | | |
| | | TRAINING | TRAINING | TRAINING |
| 10:35 AM - 12:00 PM | _ | Achieving test automation with eMEGASIM | State Space Nodal - how to use it efficiently | Using HYPERSIM's Advanced Features - part II |
| 12:00 PM - 1:00 PM | _ | LUNCH | | |
| | | TRAINING | TRAINING | TRAINING |
| 1:00 PM - 2:45 PM | _ | Large Grid Model Import Made Easy with ePHASORSIM | A New Way of Interacting with Your Model using RT-LAB | Power System Protection, Control and Monitoring Applications with HYPERSIM and IEC 61850 - Part I |
| 2:45 PM - 3:05 PM | _ | BREAK | | |
| | | TRAINING | TRAINING | TRAINING |
| 3:05 PM - 4:30 PM | - <u> </u> | ePHASORSIM: User Defined Modeling | Multi-level Modular Converter (MMC) with HYPERSIM | Power System Protection, Control and Monitoring Applications with |
| REGISTRATION | | | | HYPERSIM and IEC 61850 - Part II |
| 4:00 PM - 6:00 PM | _ | Registration period | | |
| WELCOME COCKTAIL | | 11 | | |
| 6:00 PM - 10:00 PM | _ | WELCOME COCKTAIL Evening sponsored by | hhase | |











WEDNESDAY, SEPTEMBER 6th



REGISTRATION & BREAKFAST LE WESTIN MONTREAL, 270 RUE SAINT-ANTOINE O

7:15 AM - 8:30 AM Breakfast

PRESENTATIONS

| 8:30 AM - 9:30 AM | — Welcome to RT17! |
|-------------------|--------------------|
|-------------------|--------------------|

9:30 AM - 10:40 AM Power Systems Keynote

10:40 AM - 11:10 AM BREAK

Digital Transformation - Disrupt or be Disrupted! by Denis Gaudreault, INTEL 11:10 AM - 12:00 PM

12:00 PM - 1:00 PM LUNCH

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| | | TRACK 1 - MICROGRID | TRACK 2 - POWER SYSTEMS | TRACK 3 - VARIOUS APPLICATIONS |
|-------------------|-----|---|--|--|
| 1:00 PM - 1:30 PM | | Global Trends on Microgrids, Smart Grid and Distributed Gen- eration by Sima Seidi, TetraTech, Canada | HQ experiences in case of using Control System replica interfaced with Hypersim Real-time simulator in recent HVDC upgrade projects by Alpha Oumar Barry, IREQ, Canada | Photovoltaic Grid Connected Quasi Z-Source Inverter Based on Propor- tional Resonant Controller by Amol Ramelwar Veermata Jijabai Techno- logical Institute, India |
| 1:30 PM - 2:00 PM | | Real-time simulation of predictive control of DC vehicular microgrids by Ali Mehrizi-Sani Washington State University, USA | A new switched-DC cascades multilevel inverter for distributed DC sources by Christopher Luciano,Tuskegee University, USA | Implementation of an Improved Space Vector PWM Control Strategy for Three-phase Four-leg Inverter in Wind-PV Hybrid Generation System using RT-LAB by Monalisa Pattnaik, NIT Roukela, India |
| 2:00 PM - 2:30 PM | | Real-Time co-Simulation for microgrids with OPAL-RT by Quoc Tuan Tran CEA, France | HIL Implementation using RT-LAB and dSPACE for Dynamic Phasor based Internal Model Control of Solid State Transformer in Microgrid Integration by Monika Bhagwat, Veermata Jijabai Technological Institut, India | Transmission photovoltaic energy by VSC-HVDC in Real Time: Application to Algerian – Spanish Power System Interconnection by Lila Ghomri |
| 2:30 PM - 3:00 PM | | Real-Time Hardware-in-the- Loop Co-Simulation Platform for Microgrid Analysis by Martine Chlela Mcgill University, Canada | Presentation by Sebastien Denetiere, RTE, France | Modeling and Real Time Simulation of Wind Power Systems Using Rt-Lab Platform by Mounir Khiat, Kamelb Benaama, Leilac Ghomri, Oran, Algérie |
| 3:00 PM - 3:30 PM | | BREAK | | |
| 3:30 PM - 4:00 PM | 1 - | Research @NREL using OPAL-RT by Przemyslaw Koralewicz NREL, USA | Model-Based Design Using Substation Hardened Universal Relay by Jean-Philippe Gagnon, Gentec | Design and implementation of a Modular Multilevel Converter supported by HIL simulation by Frederic Colas, L2EP Ensam, France |
| 4:00 PM - 4:30 PM | _ | SEL's Experience with modelling microgrids by TBD SEL, USA | How to use real-time simulation for a better, modern and interactive teaching experience for power system by Danielle Nasrallah, OPAL-RT TECHNOLOGIES, Canada | Shared Power System Models: Accelerating Microgrid Testing and Integration by Christopher Smith, MIT-LL |
| 4:30 PM - 5:00 PM | 17 | IDA-PB Control of SST in Hybrid AC/ DC Microgrid with RT-LAB and dSPACE Hardware-in-Loop Implementation by Ragini Meshram Veermata Jijabai Technological Institute, India | Coming Soon | A Novel Parallel Robot for Fast Pick-and-Place-Operations by Peyman Karimi Eskandary |

COCKTAIL AND DINNER

SALLE DE BAL WESTIN

5:30 PM - 6:00 PM 6:00 PM - 10:00 PM









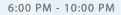


| THURSDAY, SEP | TEME | BER 7 th | | RTI7 | | | | | | |
|---------------------------------|----------------|---|--|---|--|--|--|--|--|--|
| BREAKFAST | | LE WESTIN MONTREAL, 270 RUE SAINT- | ANTOINE O | BEYOND | | | | | | |
| 7:15 AM - 8:30 AM PRESENTATIONS | | Breakfast | | | | | | | | |
| 8:30 AM - 9:00 AM | _ | A New Era of Real-Time Simulation at OPAL-RT Technologies | | | | | | | | |
| 9:00 AM - 10:00 AM | _ | Power Electronics and Power-Hardware-in-the-Loop Keynote | | | | | | | | |
| 10:00 AM - 10:30 AM | _ | Innovating in a IoT, IoP World by Greg Farthing, ABB | | | | | | | | |
| 10:30 AM - 11:00 AM | _ | BREAK | | | | | | | | |
| 11:00 AM - 11:30 AM | _ | Automotive & Transportation Keynote | | | | | | | | |
| 11:30 AM - 12:00 PM | _ | Coming soon | | | | | | | | |
| 12:00 PM - 1:00 PM | _ | LUNCH | | | | | | | | |
| TECHNICAL PRESENTATIONS | | | | | | | | | | |
| | | TRACK 1 - POWER HARDWARE IN THE LOOP & POWER SYSTEMS | TRACK 2 - POWER ELECTRONICS | TRACK 3 - TRANSPORTATION & OTHER APPLICATIONS | | | | | | |
| 1:00 PM - 1:30 PM | _ | Control- and Power-HIL for Development of Wind Farms by Florian Stelmaszek, Enercon, Germany | Automatic verification test bench for MV Drives based on "Hardware-In-the-Loop" simulation by Alain Dutrey, Schneider Electric, France | Bombardier presentation by Alain Bouchard | | | | | | |
| 1:30 PM - 2:00 PM | _ | Power Hardware-in-the-Loop and the KIT Energy Smart Home Lab Environment by Sebastian Hubschneider,Karlsruhe Institute of Technology, Germany | Real time and hardware-in-the- loop simulations of wind turbine components with the OneWind® Modelica Library by Paul Feja, Fraunhofer IWES, Germany | Real-Time Cooperative Localization With Extended And Unscented Kalman Filters For Intelligent Vehicles by Farid Bounini, Denis Gingras, Herve Pollart, Dominique Gruyer, Université de Sherbrooke, Canada | | | | | | |
| 2:00 PM - 2:30 PM | | A power-hardware-in-the loop test bench for electric machine emulation by Amitkumar K. S., Concordia University, Canada | OPAL-RT simulators in ABB MV Drives by Mathieu Giroux, ABB, Switzerland | Describing the NCREPT test facility and research with regards to the dyno and the associated driving schedules by Chris Farnell, Arkansas, USA | | | | | | |
| 2:30 PM - 3:00 PM | _ | Presentation by CENACE | HIL Implementation of Model Predictive Direct Current Control Algorithm for Power Converter using dSPACE and OPAL-RT by Nikhil Pagar | Virtual Test Bench For Marine Controllers by Dr Mukherjee Suvajit,Rolls-Royce, Singapore | | | | | | |
| 3:00 PM - 3:30 PM | ₽ Ţ | BREAK | | | | | | | | |
| 3:30 PM - 4:00 PM | _ | Status of Energy Lab 2.0 and overview of Power-Hardware- in-the-Loop activities by Jörn Geisbüsch, Karlsruhe Institute of Technology, Germany | AC power Systems for Grid Simulation, by Mahesh Thaker, BSEE, Ammetek Programmable Power | Real-Time Application of Proprioceptive Tactile Sensing with Robotic Graspers by Bruno Belzile, McGill University, Canada | | | | | | |
| 4:00 PM - 4:30 PM | _ | The importance of Electrical Fault Insertion in HILS Applications by Bob Stasonis, Pickering | High-Fidelity Power Motor Emulator for Testing Inverter and Control by Danielle Nasrallah, OPAL-RT TECHNOLOGIES | Vehicle-Grid Integration HIL for Designing Advanced Ancillary Services for Power Systems by Yutaka Ota,Tokyo City University, Japan | | | | | | |
| 4:30 PM - 5:00 PM | - | Power flow control in grid connected microgrid: Software-in- loop Implementation using RT-LAB by Mahendra Rane. Mumbai, India | Real Time Control of Doubly Fed Induction Generator by Kader Chaker, SCAMRE Laboratory; Oran, Aldérie | HIL-Grid Model on Opal-RT for testing future Grid Control Centers by Eric Glende | | | | | | |

COCKTAIL AND DINNER

TERRACE OF THE PALAIS DES CONGRÈS OF MONTREAL

by Mahendra Rane, Mumbai, India







Oran, Algérie





FRIDAY, SEPTEMBER 8th

| BREAKFAST | LE WESTIN MONTREAL, 270 RUE SAINT-ANTOINE O | |
|---------------------|---|--|
| 7:30 AM - 8:30 AM | — Breakfast | |
| VISITS (GROUP 1) | Pick-up from Le Westin at 8AM | |
| 9:00 AM - 10:00 AM | | |
| 11:00 AM - 12:00 PM | OPAL-RT Headquarters Visit & Poster Sessions | |
| VISITS (GROUP 2) | Pick-up from Le Westin at 9AM | |
| 10:00 AM - 11:00 AM | Hydro-Quebec Research Institute (IREQ) Visit – Group II | |
| | | |
| 12:00 PM - 1:00 PM | — LUNCH | |
| 1:00 PM - 3:00 PM | OPAL-RT Headquarters Visit & Poster Sessions | |
| 4:30 PM - 6:00 PM | Buses drive out, end of RT17 | |
| | | |

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